REMARKS/ARGUMENTS

The Applicant has carefully considered this application in connection with the Final Rejection electronically delivered July 2, 2010 (hereinafter "Office Action") and the Advisory Action electronically delivered September 21, 2010 (hereinafter "Advisory Action"). The Applicant respectfully requests reconsideration of this application in view of the foregoing amendment and following remarks.

The Applicant originally submitted Claims 1-29 in the application. In the present response, the Applicant has amended independent Claims 1, 26, and 29. Support for the amendment can be found, *e.g.*, in lines 9-15 on page 6 and lines 5-12 on page 9 of the original specification. No other claims have been canceled or added. Accordingly, Claims 1-29 are currently pending in the application.

I. Rejection of Claims 1-3, 6-10, 12 14, 16-17, 19, and 21-29 under 35 U.S.C. §103

Previously, the Examiner rejected Claims 1-3, 6-10, 12 14, 16-17, 19, and 21-29 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 7,234,042 to Wilson (hereinafter "Wilson") in view of U.S. Patent No. 6,292,845 to Fleck, *et al.* (hereinafter "Fleck"). The Applicant respectfully disagrees in view of the amendment.

The Examiner alleges that the claimed control processing instructions are the same as Wilson's load-store operations. The Applicant respectfully disagrees. The claimed control processing operations correspond to Wilson's so-called "special operations" which require both processing channels in Wilson to be accomplished. The fact that both the claimed control and data processing instructions can define memory access and basic arithmetic operations does not prevent

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them from being distinct types of instructions – as indeed they are in Wilson. The top of page 9 of the original specification states "The essential functions of control instructions and data instructions just mentioned, do not overlap..." The important difference here is that the claimed control instructions are dealt with by the control processing channel of the machine and the data processing instructions are dealt with by the data processing channel of the machine. In Wilson, equivalent control instructions require <u>both</u> processing channels to be handled as argued earlier. To emphasize this difference, the Applicant has amended independent Claims 1, 26, and 29 to more clearly point out that the control instructions are dedicated to program flow and branch and address generation and the claimed data processing instructions are not.

Furthermore, independent Claims 1, 26, and 29 now include the limitation that the claimed control instructions have a bit length less than the data processing instructions. Wilson teaches a control type instruction is a "long instruction." (*See, e.g.*, line 59 of column 4 of Wilson.) This is the precise opposite of the invention in view of the amendment where the control instructions explicitly have a shorter bit width than the data processing instructions. Fleck discloses the possibility of instructions with different lengths, but does not disclose that control instructions consistently have a shorter bit width than data processing instructions.

As argued in the response of September 2, 2010, the obviousness rejection in view of Wilson and Fleck can only be made based on hindsight with the claim language to select the particular parts of Fleck and Wilson. On the continuation sheet of the Advisory Action, the Examiner admits that a certain amount of hindsight reasoning is legitimate, but states that is should "take into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made." The Applicant submits that at the time the invention was made, a skilled person would

consider the inherent differences in the architecture of Wilson and Fleck to render any combination unlikely and certainly unobvious.

For at least the reasons given above, the cited portions of the cited combination of Wilson and Fleck, as applied by the Examiner, do not provide a *prima facie* case of obviousness for presently amended independent Claims 1, 26, and 29 and Claims that depend thereon. Accordingly, the Applicant respectfully requests the Examiner to withdraw the §103(a) rejection of Claims 1-3, 6-10, 12 14, 16-17, 19, and 21-29 and allow issuance thereof.

II.   Rejection of Claims 4-5, 11, 13, 15, 18, and 20 under 35 U.S.C. §103

Previously, the Examiner rejected Claims 4-5, 11, 13, 15, 18, and 20 under 35 U.S.C. §103(a) as being unpatentable over Wilson in view of Fleck and further in view of: U.S. Patent No. 6,880,150 to Takayama, *et al.* (hereinafter "Takayama") for Claims 4-5 and 11; U.S. Patent No. 5,956,518 to DeHon, *et al.* (hereinafter "DeHon") for Claims 13 and 15; U.S. Patent No. 6,725,357 to Cousin (hereinafter "Cousin") for Claim 18; and a paper entitled "Variable Length Instruction Compression for Area Minimization," by Simonen, *et al.* (hereinafter "Simonen") for Claim 20. The Applicant respectfully disagrees.

As established above, the cited portions of the cited combination of Wilson and Fleck, as applied by the Examiner, do not provide a *prima facie* case of obviousness for presently amended independent Claim 1. Takayama, DeHon, Cousin, and Simonen have not been cited to correct the above-noted deficiencies of the cited combination of Wilson and Fleck but to teach the subject matter of the above-mentioned dependent Claims. As such, the cited portions of the cited combination of Wilson and Fleck in view of Takayama, DeHon, Wilson, Cousin, or Simonen do not

provide a *prima facie* case of obviousness for presently amended independent Claim 1 and Claims that depend thereon. Accordingly, the Applicant respectfully requests the Examiner to withdraw the §103(a) rejection of Claims 4-5, 11, 13, 15, 18, and 20 and allow issuance thereof.

III.   **Conclusion**

In view of the foregoing amendment and remarks, the Applicant respectfully submits that all of the Claims currently pending in this application are in condition for allowance and therefore earnestly solicits a Notice of Allowance for Claims 1-29.

The Applicant requests the Examiner to telephone the undersigned agent of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

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